

# HF9215

1/6 CRYSTAL CAN 2 FORM C  
HERMETICALLY SEALED ELECTROMAGNETIC RELAY



## Features

- Load can be 1A 28Vd.c
- Failure rate level can be level M
- High ambient applicability
- All metal welded construction
- Fusing soldering and marked by laser

Conform to GJB65B-99 (Equivalent to MIL-PRF-39016)

## AMBIENT ADAPTABILITY

| Ambient grade             | I               | II                   | III                                     |
|---------------------------|-----------------|----------------------|---|
| Ambient temperature       | -55 °C to 85 °C | -55 °C to 85 °C      | -65 °C to 125 °C                        |
| Humidity                  |                 |                      | 98 %, 40 °C                             |
| Low air pressure          | 58.53 kPa       | 4.39 kPa             | 4.39 kPa                                |
| Sine vibration            | Frequency       | 10 Hz to 1000 Hz     | 10 Hz to 2000 Hz                        |
|                           | Acceleration    | 147 m/s <sup>2</sup> | 196 m/s <sup>2</sup>                    |
| Shock resistance          |                 | 490 m/s <sup>2</sup> | 735 m/s <sup>2</sup>                    |
| Random vibration          |                 | —                    | 20 (m/s <sup>2</sup> ) <sup>2</sup> /Hz |
| Steady-state acceleration |                 | 147 m/s <sup>2</sup> | 490 m/s <sup>2</sup>                    |
|                           |                 |                      | 490 m/s <sup>2</sup>                    |

## CONTACT DATA

| Ambient grade        | I               | II | III    |
|----------------------|-----------------|----|--------|
| Arrangement          |                 |    | 2C     |
| Contact voltage drop | Initial max.    |    | 100 mΩ |
|                      | After life max. |    | 150 mΩ |

## Contact ratings

| Contact load          | Type      | Electrical life min.    |
|-----------------------|-----------|-------------------------|
| 1 A 28 Vd.c.          | Resistive | 1 x 10 <sup>5</sup> OPS |
| 0.2 A 28 Vd.c. 200 mH | Inductive | 1 x 10 <sup>5</sup> OPS |
| 0.1 A 28 Vd.c.        | Lamp load | 1 x 10 <sup>5</sup> OPS |
| 50 µA 50m Vd.c.       | Low level | 1 x 10 <sup>5</sup> OPS |



HONGFA HERMETICALLY SEALED RELAY

## SPECIFICATION

| Ambient grade   | I                          | II                    | III                    |
|---|----------------------------|-----------------------|------------------------|
| Insulation resistance min.                            | 1000 MΩ (@ 100 Vd.c.)      | 1000 MΩ (@ 100 Vd.c.) | 10000 MΩ (@ 100 Vd.c.) |
| Dielectric strength min.<br>(Normal condition)        | Between open contacts      | 350 Vr.m.s.           | 500 Vr.m.s.            |
|   | Between contact & coil     | 350 Vr.m.s.           | 500 Vr.m.s.            |
|   | Between contact & cover    | 350 Vr.m.s.           | 500 Vr.m.s.            |
|   | Between contact group      | 350 Vr.m.s.           | 500 Vr.m.s.            |
|   | Between coil & cover       | 350 Vr.m.s.           | 500 Vr.m.s.            |
| Dielectric strength min. (Low air pressure condition) | 200 Vr.m.s.                | 300 Vr.m.s.           | 300 Vr.m.s.            |
| Leakage rate max.                                     | 1 Pa·cm³/s                 | 1 × 10⁻¹ Pa·cm³/s     | 1 × 10⁻³ Pa·cm³/s      |
| Operate time max.                                     | 6 ms                       | 4 ms                  | 4 ms                   |
| Release time max.                                     | 6 ms                       | 4 ms                  | 4 ms                   |
| Mounting style  | See the mounting dimension |                       |                        |
| Terminals   | See the terminal styles    |                       |                        |
| Work position   | Random                     |                       |                        |
| Weight max.   | 4 g                        |                       |                        |

## COIL DATA

|                   |              |
|-------------------|--------------|
| Normal coil power | Approx.0.48W |
|-------------------|--------------|

### Coil Version

Vd.c.

| Order Number | Coil voltage    |            | at 25 °C                  |                      |          |                   | -65°C to 125°C        |                      |                   |                       |     |
|--------------|-----------------|------------|---------------------------|----------------------|----------|-------------------|-----------------------|----------------------|-------------------|-----------------------|-----|
|              | Nominal voltage | Value max. | Coil resistance (1±10%) Ω | Pick-up voltage max. |          | Hold voltage max. | Drop-out voltage min. | Pick-up voltage max. | Hold voltage max. | Drop-out voltage min. |     |
|              |                 |            |                           | I                    | II , III |                   |                       | I                    | II , III          | min.                  |     |
| 006          | 6               | 8          | 90                        | 3.8                  | 3.0      | 1.5               | 0.3                   | 4.8                  | 4                 | 2.0                   | 0.2 |
| 012          | 12              | 16         | 310                       | 8.0                  | 6.0      | 3.0               | 0.6                   | 9.6                  | 8.0               | 4.0                   | 0.4 |
| 027          | 27              | 32         | 1500                      | 18.0                 | 13.5     | 10.0              | 1.5                   | 21.6                 | 18                | 14.0                  | 1.0 |

Notes: We can offer many kinds of coil voltage under the requirement of users.

## ORDERING INFORMATION

HF9215

-012

M

-0

1

- I

Type

Order Number 006、012、027

L: Failure rate level L (level III products available) <sup>1)</sup>

Failure Rate M: Failure rate level M (level III products available) <sup>1)</sup>

Nil: Without failure rate requirement(level I ,II ,III products available)

Mounting Style 0, 2, 3 (See the mounting dimension)

Terminals Style 1 (See " Terminal styles " below)

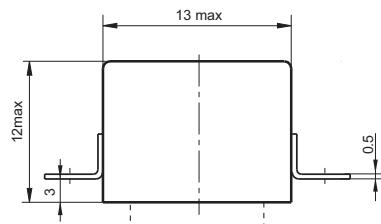
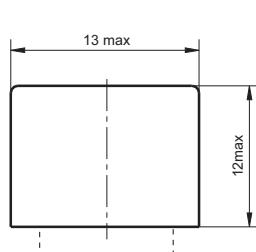
Ambient Grade I : level I II : level II III: level III

Notes: 1) For the failure rate of L or M ,the letter "III" of ambient grade level will not appear on relay cover.

## OUTLINE DIMENSIONS AND WIRING DIAGRAM

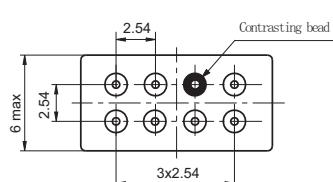
Unit:mm

Outline Dimension

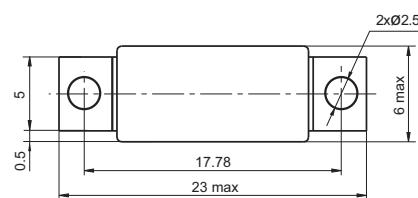


↑A

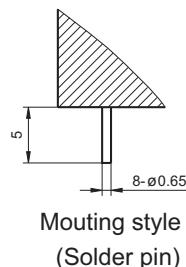
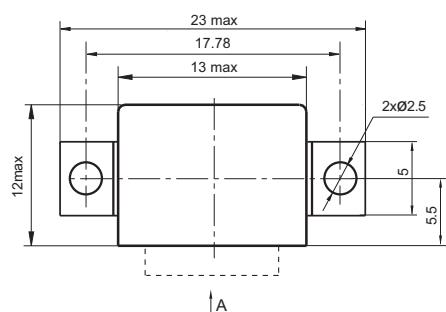
A direction



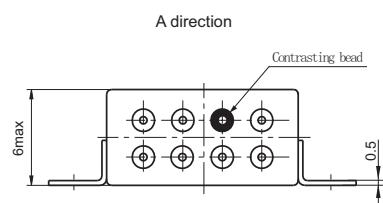
Mounting style 0



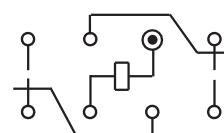
Mounting style 2



Mounting style 1  
(Solder pin)



Mounting style 3



Wiring Diagram  
(Bottom View)

### Disclaimer

This datasheet is for the customers' reference. All the specifications are subject to change without notice.

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